

Date: Mon, 13 Dec 93 04:30:34 PST
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V93 #141
To: Ham-Ant

Ham-Ant Digest Mon, 13 Dec 93 Volume 93 : Issue 141

Today's Topics:

 Help! Xmas AM Antenna
 How do you couple to a "Quad" ?

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 10 Dec 1993 11:24:35 GMT
From: destroyer!news1.oakland.edu!rcsuna.gmr.com!kocrsv01!news@uunet.uu.net
Subject: Help! Xmas AM Antenna
To: ham-ant@ucsd.edu

In article <2e7pu6\$br9@fitz.TC.Cornell.EDU> mike@baobab.cadif.cornell.edu writes:

>Hi,

>

> I don't usually read this group, but I have a question that
>perhaps the wizards here could help me with...

>

> It's time to find an Xmas gift for my Mom and we've found
>that she really enjoys listening to AM radio but the reception
>is poor. I want to get her something that will improve her reception
>and a good antenna seems to be the way to go.

>

> We can spend maybe \$100. What should we do?

>

> Please respond via Email (mike@cadif.cornell.edu). Thanks...

>

> - Michael Chase

Michael,

If your mother doesn't already have one, I would strongly suggest the General Electric Super Radio III. This is an excellent AM/FM portable radio with tuned RF stages and varactor tuning. The sensitivity and selectivity are great for a radio in its price range. Most K-Marts sell the radio for about \$45 to \$50. I think she will be more than pleased with this radio. It should deliver satisfactory results without the need for an external antenna. However, if it does not, the Super Radio III also has an external antenna jack for an AM and an FM antenna.

Keith Welford - N9IXG
(317)-451-0506

Disclaimer: The opinions given above are not those of Delco Electronics,
General Motors, or anyone else.

Date: Sat, 11 Dec 93 16:23:56 PST
From: news.service.uci.edu!cerritos.edu!news.Arizona.EDU!math.arizona.edu!noao!
asuvax!cs.utexas.edu!@network.ucsd.edu
Subject: How do you couple to a "Quad" ?
To: ham-ant@ucsd.edu

smitht@slick.sps.mot.com (Trevor G. Smith) writes:

>
> Typically a quad exhibits an impedance of 120 to 200 ohms.
> The 1/4 wavelength of 75ohm co-ax is a cheap way to match
> the 120/200 ohms.
>
> I use 4:1 current baluns on my 40m/30m/20m/17m/15m quad loops
> with SWR 1:1 at center freq.
>
> bandwidth for 1.5 swr is 300-500khz depending on band.
>
> not a cheap solution but quicker than trimming 75 ohm co-ax
> with my noise bridge.
>
> Trevor G3WQ0/AB5EU still exiled in Texas.....
>
>

It depends on what you call a quad. A full wave loop indeed has about 130 ohms impedance, depending on the height above ground and where you feed it, as well as whether or not it's in the horizontal or vertical planes.

A multi-element quad has the impedance reduced significantly by the proximity of the driven element to the director and/or reflector elements.

In fact, if you adjust the spacing of the elements, you can get pretty close to a 50 ohm impedance with a three or more element quad. You can use a balun if you wish, but in my experience, it doesn't make much practical difference. (a 1:1 balun, as compared to RG-58).

My rule of thumb is to use about .25 wavelength spacing for a quad that will match 50 ohm cable reasonably well.

(And yes, I know it won't be exactly 50 ohms, but it will be reasonably close, and it WILL work reasonably well.)

Robert Smits
VE7EMD
Ladysmith B.C.
e-mail: emd@ham.almanac.bc.ca

There is *no* idiotproof filter.
Idiots are proof against anything!
- Richard Chycoski, VE7CVS

End of Ham-Ant Digest V93 #141

